

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Jonghill Hong
 Serial No.: 10/664,066
 Conf. No.: 3251
 Filed: September 16, 2003
 For: MAGNETORESISTIVE SPIN-
 VALVE SENSOR AND
 MAGNETIC STORAGE
 APPARATUS
 Art Unit: 2862
 Examiner:

I hereby certify that this paper is being deposited with the United States Postal Service as FIRST-CLASS mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on this date.

11 Feb 04 
 Date Registration No. 29,367
 Attorney for Applicant(s)

INFORMATION DISCLOSURE STATEMENT

Mail Stop Missing Parts
 Commissioner for Patents
 P.O. Box 1450
 Alexandria, VA 22313-1450

Dear Sir:

This IDS is submitted under 37 C.F.R. §1.97(b) within either of the following time periods, whichever occurs last:

- (a) within three months of either the filing date of the national application or the date of entry into the national stage; or
- (b) before the mailing date of first office action on the merits (i.e., not including actions such as restriction requirements).

Applicant(s) submit herewith Form PTO-1449 (Information Disclosure Citation) together with copies of patents, publications or other information of which applicant(s) are aware, which applicant(s) believe may be material to the examination of this application and for which there may be a duty to disclose in accordance with 37 C.F.R. §1.56. Applicant(s) respectfully submit that the citation of any reference on Form PTO-1449 does not constitute an admission that the reference qualifies as prior art.

It is requested that the information disclosed on the enclosed Form PTO-1449 be made of record in this application.

A copy of the Search Report for PCT/JP01/09447 is enclosed. A written opinion mailed on October 25, 2002 in PCT/JP01/09447 is also enclosed.

The Commissioner is hereby authorized to charge any additional fees which may be required to this application under 37 C.F.R. §§1.16-1.17, or to credit any overpayment, to Deposit Account No. 07-2069. A duplicate copy of this sheet is enclosed.

Respectfully submitted,

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By: 
 Patrick G. Burns
 Registration No. 29,367

| <p>Form PTO-1449 U.S. Department of Commerce (Rev. 8-88) Patent and Trademark Office</p> <p>INFORMATION DISCLOSURE CITATION (Use several sheets if necessary)</p> | | | | Attorney Docket No.: 0941.68363 | | Serial No.: 10/664,066 | | |
|---|--|--|---------------|---------------------------------|-------|------------------------|-------------|----------------------------|
| | | | | Applicant: Hong et al. | | | | |
| | | | | Filing Date: Sep. 16, 2003 | | | Group: 2862 | |
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| OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.) | | | | | | | | |
| | | Hong et al., "Effect of Thin Oxide Capping on Interlayer Coupling in Spin Valves"; <i>IEEE Trans. on Magnetics</i> ; Vol. 36, No. 5; September 2000; pp. 2629-2631 | | | | | | |
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| Examiner | | | | Date Considered | | | | |

*This reference was previously submitted, but the copy of the reference might have been incomplete.